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**Identification of novel silent HIV propagation routes in Pakistan**

Saeed U *et al*. HIV in Pakistan

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**Abstract**

Human immunodeficiency virus (HIV) is rapidly increasing in different high risk populations and general populations as compared to past. In this study, silent propagating routes of sexual desire among teenaged Pakistani youth have been discussed. In order to promote sex urge among youth, regular clients of sex workers write contact details of sex workers at the doors of public washrooms. HIV prevalence is much higher among Hijra sex workers. Hijra sex workers have apparently stepped into profession of begging at public places, where they earn money by begging and promoting sexual advertisement *via* distributing visiting cards to offer unsafe sex. In many educational institutes, sex education is not frequently disseminated, which if delivered *via* assistance of teachers, government sectors and nongovernmental organizations could prevent future epidemic of sexually transmitted infections from Pakistan.

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**Key words:** Human immunodeficiency virus; Pakistan; Sex workers; Silent route; Youth

**Core tip:** Human immunodeficiency virus (HIV) is an emerging threat for rising generations in Pakistan. The prevalence of HIV is gradually increasing in different high risk populations due to rapid increase of sexual desire among Pakistani youth. Increased sexual desperation among Pakistani youngsters has outranked the rest of the world. The rate of HIV spread in Pakistan is much higher compared to any of the western countries, therefore adequate preventive measurements should be conducted as soon as it is possible, otherwise it will be very late.

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**TO THE EDITOR**

Human immunodeficiency virus (HIV) is an emerging threat for rising generations in Pakistan. The prevalence of HIV is gradually increasing in different high risk populations due to rapid increase of sexual desire among Pakistani youth. Maximum viral spread and stable maintenance in environment depends upon effectively penetrating protecting barriers[1]. Prevalence of sexually transmitted diseases was limited to certain areas but unfortunately, at the moment, its prevalence has rapidly increased to different cities as compared to past. Pakistan is an Islamic republic, where religion, law, culture and society strictly forbid sex outside marriage. Despite of recognition of sex outside marriage as crime, commercial sex is secretly being offered in society at various brothels, kothikhana, client homes, rental houses near truck stops and market places, massage parlors and hotels. Strict punishments against sex outside marriage, if implemented by any nation, could prevent individuals from extra marital sexual desire.

We have identified silent propagating routes of sexual desire among teenaged Pakistani youth. Most of the regular clients of sex workers use to write sexually attractive sentences about female sex workers at the doors of public toilet (at public places like markets, parks, picnic places, hotels and bus stands) in order to promote sex urge among young generation. Contact details about female sex workers are randomly distributed in public washrooms. Sexually desperate youngsters, after getting opportunity, indulge into risky sexual activities which prone them towards sexually transmitted infections like HIV and acquired immunodeficiency syndrome (AIDS). At the moment, fortunately the prevalence of HIV in general population is tri*via*l. But if this unsafe sexual practice would be carried on by youngsters *via* this rapid advertisement route, then it would probably generate HIV epidemic in society which could create extra burden on economy. Another highly dangerous route of sexual advertisement is through Hijra sex workers. In Pakistan, the prevalence of HIV is highest among injection drug users (IDUs) and Hijra sex workers. An exceptionally higher prevalence (37.8%) of HIV was found in IDUs from different cities of Pakistan[2,3]. Extremely higher prevalence (27.6%) of HIV was observed in Hijra sex workers of Larkana Sindh, Pakistan[4]. Similarly another study conducted in Rawalpindi (the city adjoining Pakistan’s capital) reported higher prevalence of HIV (21.6%) among transgender men[5]. The rate of HIV spread in Pakistan is much higher compared to any of the western countries, therefore adequate preventive measurements should be conducted as soon as it is possible.

Hijra is a distinct type of gender role which includes Khusras (true hermaphrodites), Zananas (crossdressers) and Narnbans (eunuchs)[6]. We have identified that majority of Hijra sex workers have started promotion of sex urge among young generation by distributing various visiting cards among shop keepers and youth as sexual advertisement. Mobile numbers and visiting addresses are written on those cards. Sexually active people usually make phone call and arrange time and place for unsafe sexual activities. Hijra sex workers have also stepped into profession of begging at various public sectors including bus stands, markets and traffic signals, where they not only earn money by begging but also promote sex work by contacting young generation. Hijras usually admire physical beauty and power of their clients thus promoting sexual relationships. Most of the youngsters who indulge into risky sexual relationships are illiterate and have poor understanding of sexually transmitted diseases and related consequences. Most of them do not have awareness and knowledge, therefore are unable to comprehend seriousity in this issue.

In educational institutes like schools and colleges, sex education is mostly avoided. Teachers are often reluctant to educate students with knowledge about awareness and prevention of sex. It would be a positive step to enhance awareness about prevention of HIV and other sexually transmitted diseases, if appropriate seminars would be arranged for the teenaged students at schools, colleges and universities. In order to miniaturize future epidemic of sexually transmitted infections harm reduction must be manipulated rather intimidating law enforcement agencies. The mysterious sex industry is based upon principal of demand and supply. Sexually desperate unemployed youth, tourists, business men, public officials, migrant workers, truck drivers and traders with omnipresent pockets of wealth create strong demand for sex work. On the other hand, various social and economic factors like acute poverty, unemployment, limited knowledge and skills and high income through sex, usually compel poor individuals towards offering sex to sex seekers. In such circumstances, suppressing measures *via* law enforcing agencies could further aggravate spread of hidden risky behaviors in society. It has been observed that Hijra sex workers have a strong wish to earn money by positive means but unfortunately our society do not accept them at various private and public sectors. Majority of Hijra sex workers are unable to earn money by positive means due to problems of sexual harassments from sexually active people. By arranging positive steps of increased income for sex workers, *via* assistance of government sectors and nongovernmental organizations (NGOs) to live honored livelihood, their risky sexual activities and behaviors can be reduced significantly from our society.

Policy makers should not only provide wider opportunities for dissemination of awareness and knowledge about risk factors associated with viral transmission among populations at risk; but also focus on identification of epidemiological patterns associated with sexually transmitted infections among various high risk populations of Pakistan. At the moment, inadequate sexually transmitting infections surveillance system exists with inappropriate identification of subpopulations where deadly pathogens are secretly propagating. There exists very trivial knowledge about access of antiretroviral therapy clinics to general and high risk populations. Expanded scientific research is also an important factor for successful demarcation of surveillance of sexually transmitted infections. Among target populations, simple diagnostic tests against HIV could only provide information regarding prevalence and trend of HIV. If the serum subsamples are screened against other sexually transmitted infections (like hepatitis C virus and herpes simplex virus 2) after recording valuable basic demographic and behavioral data, then it would be helpful to identify risk behavior surveillance trends over time. Another possible way towards harm reduction in Pakistan is *via* supporting community organizations and NGOs. The mysteries of complex HIV (and other sexually transmitted infections) dynamics could also be investigated *via* assistance of molecular epidemiology studies and mathematical modeling.

**REFERENCES**

1 **Rodpothong P**, Auewarakul P. Viral evolution and transmission effectiveness. *World J Virol* 2012; **1:** 131-134. DOI: 10.5501/wjv.v1.i5.131

2 **Akhtar H**, Badshah Y, Akhtar S, Kanwal N, Akhtar MN, Zaidi NU, Qadri I. Prevalence of human immunodeficiency virus infection among transgender men in Rawalpindi (Pakistan). *Virol J* 2012; **9**: 229 [PMID: 23039269 DOI: 10.1186/1743-422X-9-229]

3 **Altaf A**, Zahidie A, Agha A. Comparing risk factors of HIV among hijra sex workers in Larkana and other cities of Pakistan: an analytical cross sectional study. *BMC Public Health* 2012; **12**: 279 [PMID: 22490045 DOI: 10.1186/1471-2458-12-279]

4 **Hawkes S**, Collumbien M, Platt L, Lalji N, Rizvi N, Andreasen A, Chow J, Muzaffar R, ur-Rehman H, Siddiqui N, Hasan S, Bokhari A. HIV and other sexually transmitted infections among men, transgenders and women selling sex in two cities in Pakistan: a cross-sectional prevalence survey. *Sex Transm Infect* 2009; **85** Suppl 2: ii8-i16 [PMID: 19307351 DOI: 10.1136/sti.2008.033910]

5 **Laith J**, Abu-Raddad, Akala F A, Semini I, Riedner G, Wilson D, et al. Characterizing the HIV/AIDS epidemic in Middle East and North Africa time for strategic action. The World Bank 2010; ISBN: 978-0-8213-8137-3.

6 **Abdullah MA**, Basharat Z, Shafqaat A, Kamal B, Hasan ZF, Jan AD. Awareness about sexually transmitted infections among Hijra sex workers of Rawalpindi/Islamabad. Pak J Public Health. 2012; **2**: 40–45.

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